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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: C. Halliday)
Application No.: 09/922,487) Group Art Unit: 2155
Filed: August 3, 2001) Examiner: Bates, Kevin
FOR: Method and Apparatus for Selecting Satellite)
Audio Radio Channels)

Commissioner for Patents
P.O. Box 1450
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APPEAL BRIEF

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 31, 2007

Sir,

Appellant hereby submits the following Appeal Brief in connection with this application.

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I. Real Party in Interest (37 C.F.R. § 41-37 (C)(1)(i))

The real party in interest is Christina M. Halliday, the assignee of all right, title and interest in the above-referenced patent application.

II. Related Appeals and Interferences (37 C.F.R. § 41.37 (C)(1)(ii))

There are no prior or pending appeals, interferences or judicial proceedings known to appellant, the appellant's legal representative, or the assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims (37 C.F.R. § 4137 (C)(1)(iii))

Claims 41-43, 55-53, 55-64, and 74-81 stand rejected under 35 U.S.C., § 112, first paragraph.

Claims 41-43, 45, 47, 48, 50-53, 55-56, 58, 61-64, 74-77 and 81 stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins, U.S. Patent No. 6,317,882, in view of Titlebaum et al., U.S. Patent No. 6,549,774, in further view of Owens et al., U.S. Patent No. 6,067,278.

Claims 46 and 57 stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown. and Owens et al., in further view of Barton, U.S. Patent No. 6,233,389.

Claims 49, 59, 79, and 80 stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown and Owens et al., in further view of Wall, U.S. Patent No. 6,055,244.

IV. Status of Amendments (37 C.F.R. § 41.37 (C)(1)(iv))

No amendment has been filed subsequent to the final rejection dated March 21, 2007.

V. Summary of Claimed Subject Matter (37 C.F.R. § 41.37 (C)(1)(v))

Claim 41 recites a method of selecting a station among a plurality of stations, comprising the steps of: receiving on a single mobile receiver a plurality of stations, each station comprising a digitally encoded stream containing a designation representative of a work of authorship that is being broadcast over a global communication network, said global communication network having a plurality of stations; decoding a selected station from among the plurality of stations; comparing the decoded station with a user designated work of authorship that was selectively saved in a memory by a user while the work of authorship was playing to determine an indication that the user designated work of authorship is playing on the decoded station received by the receiver, wherein the step of comparing occurs while the receiver is providing audio to the user; alerting a user to a station other than the station that the user is currently listening to, wherein the other station is playing the user designated work of authorship; and wherein the global communication network comprises a digital satellite audio radio network.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a method of selecting a station among a plurality of stations, comprising the steps of: receiving on a single mobile receiver (Fig. 3, Ref. 320, pg. 19, lines 11 and 12) a plurality of stations (Fig. 3, Refs. 315-319, pg. 19, lines 11 and 12), each station comprising a digitally encoded stream containing a designation representative of a work of authorship that is being broadcast over a global communication network (pg. 19, lines 9-13), said global communication network having a plurality of stations (pg. pg. 19, lines 11 and 12); decoding a selected station from among the plurality of stations (pg. 22, line 25 through pg. 23, line 1); comparing the decoded station with a user designated work of authorship (pg. 19, lines 16-19) that was selectively saved in a memory by a user while the work of authorship was playing (pg. 23, lines 19-23) to determine an indication that the user designated work of authorship is playing on the decoded station received by the receiver (pg. 19, lines 16-19), wherein the step of comparing occurs while the receiver is providing audio to the user (pg. 6, lines 12-14); alerting a user to a station other than the station that the user is currently listening to (pg. 6, lines 12-14), wherein the other station is playing the user designated work

of authorship pg. 6, lines 10-14); and wherein the global communication network comprises a digital satellite audio radio network (pg. 5, line 8).

Claim 43 recites a method of selecting an audio broadcast among two or more audio digital broadcast stations, comprising the steps of: receiving on a single mobile receiver a digitally encoded stream of at least two broadcast stations over a global communication network, wherein at least one broadcast station contains a station designation of a work of authorship as an indication of a work of authorship contained in a signal from the broadcast station; decoding a broadcast station; providing a user designation of a work of authorship; storing through user selection the user designation of a work of authorship in a memory while the station is playing the work; comparing the saved user designation of a work of authorship with the station designation of a work of authorship at 0.01 second to 3 minute intervals while the receiver is providing audio to the user; alerting a user of desired content if a user designation of a work of authorship matches a station designation of a work of authorship that is playing on a station other than the station that the user is currently listening to; and wherein the global communication network comprises a digital satellite audio radio network.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a method of selecting an audio broadcast among two or more audio digital broadcast stations, comprising the steps of: receiving on a single mobile receiver (Fig. 3, Ref. 320, pg. 19, lines 11 and 12) a digitally encoded stream of at least two broadcast stations over a global communication network, wherein at least one broadcast station contains a station designation of a work of authorship as an indication of a work of authorship contained in a signal from the broadcast station (Fig. 3, Refs. 315-319, pg. 19, lines 11 and 12); decoding a broadcast station (pg. 22, line 25 through pg. 23, line 1); providing a user designation of a work of authorship (pg 19, lines 9 through 19); storing through user selection the user designation of a work of authorship in a memory while the station is playing the work (pg 19, lines 9 through 19 and Example 4); comparing the saved user designation of a work of authorship with the station designation of a work of authorship at 0.01 second to 3 minute intervals while the receiver is providing audio to the user (page 6, lines 10 through 14 and page 8, lines 23 through 26); alerting a user of desired content if a user designation of a work of

authorship matches a station designation of a work of authorship that is playing on a station other than the station that the user is currently listening to (page 6, lines 10 through 14); and wherein the global communication network comprises a digital satellite audio radio network (page 6, lines 4 through 7).

Claim 52 recites a device for receiving digital audio radio signals and selecting channels containing user desired content, comprising: a single mobile receiver for receiving over a global communication network a digitally encoded stream of at least two broadcast stations, wherein at least one station broadcast contains a designation of a work of authorship as an indication of content of the station broadcast; a decoder for selectively decoding a station broadcast; a user interface for a user to selectively store a user designation of a work of authorship in a memory, wherein the designation is saved during receipt of the work; a general purpose computer programmed to compare an earlier selectively saved user designation of a work of authorship with a station designation of a work of authorship at 0.01 second to 3 minute intervals while the receiver is providing audio to the user and to alert a user of desired content if a stored designation of a work of authorship matches the designation of a work of authorship in the at least one broadcast station other than the station that the user is currently listening to; and wherein the global communication network comprises a digital satellite audio radio network.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a device for receiving digital audio radio signals and selecting channels containing user desired content, comprising: a single mobile receiver (Fig. 3, Ref. 320, pg. 19, lines 11 and 12) for receiving over a global communication network a digitally encoded stream of at least two broadcast stations, wherein at least one station broadcast contains a designation of a work of authorship as an indication of content of the station broadcast Fig. 3, Refs. 315-319, pg. 19, lines 11 and 12); a decoder for selectively decoding a station broadcast (pg. 22, line 25 through pg. 23, line 1, Example 3); a user interface for a user to selectively store a user designation of a work of authorship in a memory, wherein the designation is saved during receipt of the work (Example 4); a general purpose computer programmed to compare an earlier selectively saved user designation of a work of authorship with a station designation of a work of authorship at 0.01 second to 3 minute intervals (page 6, lines 10 through 14 and

page 8, lines 23 through 26) while the receiver is providing audio to the user and to alert a user of desired content if a stored designation of a work of authorship matches the designation of a work of authorship in the at least one broadcast station other than the station that the user is currently listening to (page 6, lines 10 through 14); and wherein the global communication network comprises a digital satellite audio radio network (page 6, lines 4 through 7)..

Claim 61 recites a method of selecting a satellite audio radio channel, comprising the steps of: receiving one or more digital satellite audio radio channels using a single mobile receiver, wherein one or more of the channels includes additional information that indicates the content of one or more of the channels; comparing the information on one or more of the received digital satellite audio radio channels with a designation of a work of authorship that was selectively saved in a memory by a user when the work of authorship was playing on the receiver to determine whether the user designated work of authorship is currently playing on one or more of the digital satellite audio radio channels receivable by the receiver, wherein the step of comparing the information occurs while the receiver is providing audio to the user; and alerting the user to a satellite audio radio channel other than the channel that the user is currently listening to, wherein the channel to which the user is alerted is playing the user designated work of authorship.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a method of selecting a satellite audio radio channel, comprising the steps of: receiving one or more digital satellite audio radio channels using a single mobile receiver (Fig. 3, Ref. 320, pg. 19, lines 11 and 12), wherein one or more of the channels includes additional information that indicates the content of one or more of the channels (page 23, lines 8 to 15); comparing the information on one or more of the received digital satellite audio radio channels with a designation of a work of authorship that was selectively saved in a memory by a user when the work of authorship was playing on the receiver to determine whether the user designated work of authorship is currently playing on one or more of the digital satellite audio radio channels receivable by the receiver (page 6, lines 4 to 14, and Example 4), wherein the step of comparing the information occurs while the receiver is providing audio to the user (page 6, lines 12 through 14); and alerting a the user to a satellite audio radio channel other than the

channel that the user is currently listening to (page 6, lines 12 through 14), wherein the channel to which the user is alerted is playing the user designated work of authorship. (page 6, lines 12 through 14)

Claim 74 recites a receiver, comprising: a mobile general purpose computer comprising a single mobile receiver, wherein the receiver is configured to receive one or more digital satellite audio radio broadcast channels, the general purpose computer is also configured to receive data indicating what is being played on each channel; wherein the general purpose computer further includes a memory, the memory includes a playlist of designations of works of authorship selectively saved in the memory by the user, and the general purpose computer is configured to alert a user to change the channel to a specific broadcast channel other than the channel that the user is currently listening to if the data of any one channel corresponds to a designation in the playlist wherein the alert is provided to a user while the receiver is also providing audio to the user.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a receiver, comprising: a mobile general purpose computer (page 19, .lines 9 to 11) comprising a single mobile receiver (Fig. 3, Ref 320, pg 19, lines 11 and 12, Page 22, lines 10-13), wherein the receiver is configured to receive one or more digital satellite audio radio broadcast channels (page 19, lines 3 to 5 and Example 3), the general purpose computer is also configured to receive data indicating what is being played on each channel (Example 3); wherein the general purpose computer further includes a memory (page 19, 10 to 15), the memory includes a playlist of designations of works of authorship selectively saved in the memory by the user (Examples 3 and 4), and the general purpose computer is configured to alert a user to change the channel to a specific broadcast channel other than the channel that the user is currently listening to if the data of any one channel corresponds to a designation in the playlist wherein the alert is provided to a user while the receiver is also providing audio to the user (Page 6, lines 10 to 14).

Claim 75 recites a method of selecting a radio station, comprising the steps of: using a single mobile receiver to receive one or more digital satellite audio radio stations and data from a satellite wherein the data indicates what work of authorship is being played on the one

or more digital satellite audio radio stations; selectively inputting a designation of a user desired work of authorship into a memory of a general purpose computer while the work of authorship is playing on the single receiver, wherein the general purpose computer is adapted to monitor the data received by the receiver while the receiver is providing audio to the user; using the general purpose computer to monitor the data; and receiving an alert when the data corresponds to the earlier input designation of the user desired work of authorship thereby indicating that the desired work of authorship is being played on one or more of the digital satellite audio radio stations other than the station the user is currently listening to.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a method of selecting a radio station, comprising the steps of: using a single mobile receiver (Fig. 3, Ref 320, pg 19, lines 11 and 12) to receive one or more digital satellite audio radio stations and data from a satellite wherein the data indicates what work of authorship is being played on the one or more digital satellite audio radio stations (page 19, lines 3 to 5 and Example 3); selectively inputting a designation of a user desired work of authorship into a memory of a general purpose computer while the work of authorship is playing on the single receiver (Example 4), wherein the general purpose computer is adapted to monitor the data received by the receiver while the receiver is providing audio to the user (Example 3); using the general purpose computer to monitor the data (Example 3); and receiving an alert when the data corresponds to the earlier input designation of the user desired work of authorship thereby indicating that the desired work of authorship is being played on one or more of the digital satellite audio radio stations other than the station the user is currently listening to (page 6, lines 10 to 14 and Examples 3 and 4).

Claim 76 recites a method of selecting a satellite audio radio channel, comprising the steps of: using a single mobile receiver to receive a digital audio radio channels and additional information from a satellite wherein the information indicates which works of authorship are being broadcast on one or more of at least 100 digital satellite audio radio channels; using the single mobile receiver to compare the information with a user designated work of authorship that was selectively saved in a memory by a user during an earlier receipt of that work of authorship on the receiver to determine whether the user designated work of authorship is playing on one or more of the digital satellite audio radio channels while the

receiver is providing audio to the user; receiving an alert to change to the one or more of the digital satellite audio radio channels playing the user designated work of authorship other than the channel that the user is currently listening to when the information of one or more of the at least 100 channels corresponds to the user designated work of authorship.

In this regard, examples in the specification are disclosed from page 5 to page 25 and at Fig. 3. The exemplary embodiments and non-limiting prophetic examples disclose a method of selecting a satellite audio radio channel, comprising the steps of: using a single mobile receiver (Fig. 3, Ref. 320, pg. 19, lines 11 and 12) to receive a digital audio radio channels and additional information from a satellite wherein the information indicates which works of authorship are being broadcast on one or more of at least 100 digital satellite audio radio channels (Example 3); using the single mobile receiver to compare the information with a user designated work of authorship (Example 3) that was selectively saved in a memory by a user during an earlier receipt of that work of authorship on the receiver (Example 4) to determine whether the user designated work of authorship is playing on one or more of the digital satellite audio radio channels while the receiver is providing audio to the user (Example 3); receiving an alert to change to the one or more of the digital satellite audio radio channels playing the user designated work of authorship other than the channel that the user is currently listening to when the information of one or more of the at least 100 channels corresponds to the user designated work of authorship (page 6, lines 4 to 14, Example 3).

VI. Grounds of Rejection to be Reviewed on Appeal (37 C.F.R. § 41.37 (C)(1)(vi))

Appellant respectfully requests review on Appeal of the Examiner's rejection of:

(a) claims 41-43, 55-53, 55-64, and 74-81 which stand rejected under 35 U.S.C., § 112, first paragraph;

(b) claims 41-43, 45, 47, 48, 50-53, 55-56, 58, 61-64, 74-77 and 81 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins, U.S. Patent No. 6,317,882, in view of Titlebaum et al., U.S. Patent No. 6,549,774, in further view of Owens et al., U.S. Patent No. 6,067,278;

(c) claims 46 and 57 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown and Owens et al., in further view of Barton, U.S. Patent No. 6,233,389; and

(d) claims 49, 59, 79, and 80 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown and Owens et al., in further view of Wall, U.S. Patent No. 6,055,244.

VII. Argument (37 C.F.R. §41.37 (C)(l)(vii))

A. Whether the Rejection of the Claims Under 35 U.S.C., § 112, First Paragraph Is Improper

Appellant respectfully requests review on Appeal of the Examiner's rejection of claims 41-43, 55-53, 55-64, and 74-81 which stand rejected under 35 U.S.C., § 112, first paragraph for inclusion of the word "single" in the claims.

1. Relevant Law

35 U.S.C. § 112, first paragraph recites:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). The examiner has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. In re Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976); Ex parte Sorenson, 3 USPQ2d 1462, 1463 (Bd. Pat. App. & Inter. 1987).

It is well established that the claims do not have to mirror the specification, see, e.g., MPEP 2163 and Martin v. Johnson, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating "the description need not be in *ipsis verbis* [i.e., "in the same words"] to be sufficient").

Moreover, words in claims are to be given their broadest *reasonable* interpretation consistent with the specification where the patent has not yet issued and the applicant has an opportunity to change them. In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (1971). The interpretation must be reasonable, since words or terms have to be given the meaning called

for by the specification of which they form a part. In re Rovka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

2. In View of the Facts and Relevant Law, the Rejection is Improper

In the present case, the Examiner presents no reasoning that would support a § 112 rejection of the word “single” in the claims. Rather, the Examiner’s statements for the rejection point to the first full paragraph of page 6 of the application and indicates that the cited paragraph supports “at least one satellite radio receiver.”

Appellant submits that the alleged basis for the rejection actually supports the clarifying amendment. In the present case, appellant merely amended the claims to more clearly claim the one receiver of the first full paragraph of page 6. In other words, the specification supports at least one receiver and appellant has claimed only one.

In addition, appellant respectfully submits that the specification as filed is replete with reasonable support for the claimed receiver, including at least single reference number 320 in Fig. 3 and reference to “a receiver” and “the receiver 320” in the specification (see, e.g., In re Reynolds, 443 F.2d 384, 170 USPQ 94 (CCPA 1971) (relationships clearly depicted in the drawings provided sufficient disclosure to support claims)).

Moreover, even in the absence of the amendment to include the now rejected word “single”, the claims are limited such that the same receiver is used to save a user selection, scan in real time for the selection while also providing audio to a user and then alerting a user to another channel. Thus, notwithstanding the amendment, the claims were already written to specifically exclude the teachings of the cited art, as explained below.

Clearly, a reasonable, plain reading of the claims indicates that one, single stand-alone receiver is used to perform all receiver functions recited in the rejected claims. When the claims are each viewed as a whole, none of the relevant limitations of the claims refer to anything but “the receiver” of the claims, e.g., no limitation refers to “a second receiver” or “an auxiliary receiver” which may function to perform limitations of the claims.

In view of the foregoing, an ordinary person skilled in the art at the time the application was filed would have recognized that the appellant was in possession of the

single receiver invention as claimed in view of the disclosure of the application as filed, and thus the rejection is improper.

B. Whether Appellant Has Shown that the Examiner Erred in Holding That the Combination of Robbins with the Art of Record Would Have Rendered the Subject Matter of the Claims Obvious

Appellant respectfully requests review on Appeal of the Examiner's rejection of (1) claims 41-43, 45, 47, 48, 50-53, 55-56, 58, 61-64, 74-77 and 81 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins, U.S. Patent No. 6,317,882, in view of Titlebaum et al., U.S. Patent No. 6,549,774, in further view of Owens et al., U.S. Patent No. 6,067,278; (2) Claims 46 and 57 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown. and Owens et al., in further view of Barton, U.S. Patent No. 6,233,389; and (3) Claims 49, 59, 79, and 80 which stand rejected under 35 U.S.C. § 103 as unpatentable over Robbins in view of Brown and Owens et al., in further view of Wall, U.S. Patent No. 6,055,244.

It is appellant's position that none of the references, alone or in combination, teach or suggest a single receiver useful to save a user selection, scan in real time for the selection while also providing audio to a user and then alerting a user to another channel.

Although appellant asserts that the claims do not stand or fall together because many of the claims recite different bases for patentability that are not recited in the art and because the pending claims recite both method and apparatus claims, as discussed below, appellant submits that independent claim 61 is generally representative of the claims.

1. Relevant Law and Rules and Facts

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459,467 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, "there must be

some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness' . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007)(quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

In *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15.17. The analysis is objective:

Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.. *Id.*, at 17.18.

As the Court noted in *KSR*, while the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls.

The MPEP states, in relevant part:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. MPEP § 2142.

The Robbins, Owens et al. and Titlebaum et al. References

Robbins teaches one of ordinary skill to retrofit a main receiver that does not scan

with additional auxiliary receivers to give a user the functionality of scanning data streams. In Robbins, only the main receiver selectively saves data for a user and only the auxiliary receivers scan for data. Thus, Robbins requires at least a dedicated main receiver and an auxiliary receiver, where each has separate functionality and each are used together in a *system*, as explained below in section 2(b). Robbins is deficient in that it does not describe, at least, satellite radio type signals. To allegedly arrive at the claimed invention, the Examiner then merely cites the secondary references of the rejection as support for showing that one of skill in the art would have combined (1) satellite radio (**Titlebaum et al.**) and (2) and time-shifting (**Owens et al.**) with Robbins to allegedly arrive at the claimed invention.

General Summary of the Claimed Invention

The presently claimed invention is directed to a receiver that selectively saves and scans for satellite audio radio data and provides audio and alerts a user. The claims are written to specifically exclude from their scope the retrofit “system of receivers” approach of Robbins, and the claims further recite other features which are not disclosed or suggested in the art, as explained below. Hardware details of how the steps are taken can be found throughout the specification, including at least Fig. 3 and its description, and the non-limiting prophetic examples.

Appellant respectfully asserts that the pending claims are allowable over the cited art because the Examiner failed to establish a *prima facie* showing of obviousness because each claim limitation cannot be found, alone or in combination, in the cited art; and because a properly applied Graham analysis supports the patentability of the claimed invention.

2. In View of the Facts and Relevant Law, the Rejection Under § 103 is Improper Because the Examiner Failed to Properly Determine the Scope And Content Of The Cited Art and Ascertain the Differences Between The Cited Art And The Claims At Issue

Appellant asserts that in view of the facts and law, the rejection under § 103 is improper because, using the first two *Graham* factors as background, (a) the Examiner has failed to identify the Examiner’s own suggested limitation in the art of record, (b) the cited art references, alone or in combination, do not show a receiver that saves data through user

selection, and which also scans for data on other satellite audio radio channels that are not currently listened to, (c) the Examiner has failed to consider other limitations in the claims.

(a). Whether the Failure to Identify Each and Every Claim in the Cited Art Establishes the Non-Obviousness of the Claims

The alleged prior art must teach or suggest all of the limitations of the claims alleged to be obvious. *In re Royka*, 490 F.2d 488 (CCPA 1974) (holding that to establish *prima facia* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art).

Here, the Examiner has failed establish a *prima facie* showing of obviousness because the Examiner erred in ascertaining the differences between the cited art and the claims at issue by failing to show that each claim limitation is recited or suggested in the cited art. Specifically, none of the references, alone or in combination, teach or suggest that the same receiver that saves a designation of a work of authorship also scans for selections in real time while providing audio to a user and then also alerts a user to another channel.

Each independent claim is directed to a method or device that, generally, receives information provided on one or more satellite audio radio channels and compares that information to a database of designations (e.g., titles, artists names, or codes that correspond to the preceding, etc), that have been earlier selectively saved in a memory by a user using the receiver. While the one receiver of the claims provides audio to a user (e.g., via a signal to a speaker and the like), the invention also compares the data of other channels received by the receiver that are not being listened to with the data that has been earlier saved, and if a match is found, an alert is provided to a user so that the user can optionally change the current receiver channel.

Based on the discussion with the Examiner during the interview on October 30, 2006, appellant agreed to clarify the independent claims to explicitly incorporate the Examiner's suggested limitation to distinguish the claims from the art of record such that the claims recite that the user is alerted to change to a channel other than the channel that the user is currently listening to when a match occurs.

Specifically, each independent claim recites

“wherein the step of comparing the information occurs while the receiver is providing audio to the user...”

Thus, the claims require that the receiver that is receiving a signal and is used for selectively saving data and scanning also provides audio to a user while scanning occurs..

It was agreed that his amendment complied with the Examiner’s suggestion that limiting the invention to require that scanning runs in the background of the same receiver that is providing audio to the user would distinguish the invention because the amendment limits the claims such that the same single receiver saves, scan, alerts and provides audio to the user, whereas the cited art requires multiple receivers to accomplish these functions.

The distinction of the amendment was further confirmed with the Examiner during discussions held on December 8, 2006, in that the references make clear that only the auxiliary receiver(s) scan for data and only the main receiver provides media (e.g., audio) to the user. Thus, the claimed invention is distinguished over the art, at least because the claims require scanning to occur using the same receiver that provides audio to a user.

Notwithstanding multiple discussions with the Examiner and compliance with the Examiner’s own suggestion, the claims continue to be rejected without rational bases. For example, with respect to the rejection of claim 41, rather than provide evidentiary support for the Examiner’s own suggested limitation, the Examiner ignores the limitation, and instead improperly characterizes the claimed invention as an obvious “combination invention,” without providing any reasoning or evidence that the Examiner’s own suggested limitation is found in the cited art or that all of the claimed limitations result from some combination of teachings. See page 4 of the final Examiner Action, first full paragraph. The Examiner further fails to address the suggested limitation in independent claims 43, 52, 61, 74, and 76.

Moreover, appellant submits that based on, at least, the interrelationship between the claim limitations, the Examiner cannot show that the combination of teachings of the cited references suggests, much less teaches, one receiver that receives a signal, saves data based on a user selection, scans, and also provides audio to a user and alerts the user.

Particularly with a “functional approach” to the claims, the improvement is more than the predictable use of elements according to their established functions because nothing in

the cited art shows that one receiver can even function in the manner claimed by appellant and the art teaches away from the claims, as explained below.

(b). Whether the Examiner’s Failure To Show That the Combination Of References Provides a Receiver That Can Function to Save Data Through User Selection and Which Also Can Function To Scan For Data While Providing Audio to a User Establishes That There Is More Of A Difference Between The Claimed Subject Matter And Cited Art Than A Predictable “Combination”

Notwithstanding the fact that the Examiner fails to point to any teachings in any of the cited references for the limitation described above, the Examiner also improperly considers the claimed invention as a combination invention of the type described in *Ex parte Ramsey Catan* (BPAI, July 2007), thereby erring in both (1) determining the scope and content of the cited art as well as (2) ascertaining the differences between the cited art and the claims at issue. The claimed invention is more than “Robbins plus satellite radio.”

From a functional perspective, the facts show that there is more of a difference between the claimed subject matter and cited art than a predictable “combination.” As explained above in section 2(a) and in (b)(i), below, and unlike the analysis of the invention in *Ex parte Ramsey Catan*, appellant’s claimed invention requires more than a mere substitution of a satellite radio signal for another data stream type already described in Robbins. Specifically, appellant’s claimed invention accomplishes with one satellite audio receiver that which previously would have required two or more receivers. Similarly, unlike the invention described in *Ex Parte Smith* (BPAI, June 2007), there is a difference between the claimed subject matter and the cited art beyond a combination, as described above in section (a), and also described below in sections (b)(i) through (b)(iii).

In rejecting the claims, the Examiner indicates “There is no clear teaching in any of those sections of any other part of the specification that supports the idea that the claimed invention teaches any more than a receiver system such as Figure 8(a), element 802.” (Page 18, Examiner Action dated March 21, 2007).

However, the Examiner misunderstands the reference teachings. Robbins clearly explains at column 40 that element 802 is a system of a main receiver (804) and one or more

auxiliary receivers (806), which is completely different than the claimed invention. Moreover, the same column explains that the main and auxiliary receivers have different functions. Robbins (and therefore the alleged hypothetical combination of Robbins, Titlebaum et al. and Owens et al. or any other reference) requires a system which includes two or more receivers, namely one main receiver and one or more auxiliary receivers; to accomplish what appellant has done with just one satellite audio radio receiver.

More particularly, Robbins' main receiver (e.g., receiver 804) provides content to the user and stores ID codes based on user selection. However, the main receiver does not scan for ID codes. Consistent the "retrofit" nature of Robbins, Robbins' teachings limit scanning to the add-on auxiliary receivers. Therefore, Robbins requires a dedicated main receiver in combination with one or more dedicated auxiliary receivers to selectively save and scan.

Although Robbins indicates that the auxiliary receiver may automatically send ID codes (e.g., designations) to a memory (see, e.g., col. 40, lines 50-59), such storage is accomplished automatically and not by user selection, as explained at col. 40, lines 48-59. Further, these stored ID codes are for purposes other than for comparison to user selected ID codes. For example, the auxiliary receiver of Robbins merely stores ID codes for prioritization, as described at column 39, lines 30 to 42.

For the following reasons appellant also respectfully submits that arriving at the claimed invention would have been *uniquely challenging and difficult* for one of ordinary skill in the art at the time of the invention.

First, unlike the claimed invention which requires that the same receiver receives a signal, saves data based on a user selection, scans, and also provides audio to a user, Robbins provides that (1) only the main receiver stores in a memory ID codes based on user selection and (2) only auxiliary receivers scan for ID codes for comparison to the selectively saved ID code(s). For example, col. 11, lines 10-31, and in particular lines 25-31, col. 11, lines 47-53, and col. 24, lines 19-34, describe how to achieve the foregoing embodiments and objectives of Robbins using auxiliary receivers. Furthermore, the description of Fig. 1 of Robbins indicates that auxiliary receivers are used (see, e.g., col. 31, lines 62-67 (one auxiliary receiver) and col. 33, lines 24-37 (a plurality of auxiliary receivers)). Moreover, the written description of Fig. 5(A) denotes that the figure includes auxiliary receivers, see col. 32, lines

1-22. Other indicia of the requirement of one or more auxiliary receivers are apparent throughout the teaching of Robbins, as described hereafter.

Second, appellant next respectfully points to the evidence of Figs. 10(A) and 10(B), and the description thereof at col. 42, lines 19-53 of Robbins, which also outlines the requirement of auxiliary receivers *in a system* of receivers. Appellant also respectfully points out that all of the independent claims of Robbins also require auxiliary receivers for scanning, which again is contrary to appellant's claimed receiver that (1) receives a signal, (2) saves data based on a user selection, (3) scans, and (4) also provides audio to a user.

Third, and further undercutting the Examiner's position that Robbins' "system" can be considered "a receiver," the last paragraph before the "Exemplary Embodiment," sets forth requirements by reciting the following at col. 40, lines 1-6:

"The following exemplary embodiment, includes a receiving system having a plurality of auxiliary receiver, each for scanning a plurality of data streams in an interlaced fashion. One of skill in the art, after reading the present disclosure, would know how to implement the remaining embodiments as described above in light of the following embodiment."

Thus, appellant respectfully submits that Robbins self evidences that all of the preceding embodiments described require one or more auxiliary receivers, consistent with all of the cited paragraphs above, the intent of Robbins to retrofit existing main receivers, and the description of the exemplary embodiment. To view the teachings of Robbins otherwise is unreasonable because Robbins clearly requires separate dedicated main and auxiliary receivers.

Robbins' exemplary embodiment itself, the description of which starts at col. 40, line 9, and which particularly references Figs. 8(A) and 8(B), clearly includes a main receiver (804) and one or more auxiliary receivers (806).

The exemplary embodiment of Robbins also provides insight as to the interaction that is required between the one or more auxiliary receivers and the main receiver, and the functions of each in the system of Robbins. Specifically, and as described at col. 40, lines

25-41, the main receiver 804 stores an ID code and only the auxiliary receiver(s) scan the spectrum of data streams for ID codes and sends the ID codes to comparator unit 808.

Robbins and thus the combination of Robbins with the other references used in the rejection, requires communication between a main receiver and one or more auxiliary receivers via a comparator. Again, Robbins does not teach or suggest that the auxiliary receiver selectively stores ID codes based on a user selection, nor does Robbins teach or suggest that the main receiver scans; and therefore even if combined in the manner suggested by the Examiner, the cited art does not render the claims obvious.

Appellant's position that the cited art fails to teach each and every limitation of the claims and that the claimed invention is more than a predictable combination is further bolstered by the evidence contained in the cited references themselves. Consistent with *KSR v. Teleflex*, when the claims are viewed as a whole (i) the claims provide indicia of non-obviousness; (ii) the art teaches away from the alleged modification and/or combination of Robbins with other references; and (iii) there is no reasonable expectation of success at arriving at the claimed invention.

i. Under MPEP 2144.04, The Claims Provide Indicia of Non-Obviousness

Under the rules set forth in the MPEP § 2144.04, the claimed invention is unobvious because, generally, Robbins' required feature of one or more auxiliary receivers that scan for ID codes is omitted, while appellant's invention retains the omitted features function. Specifically, the claimed invention omits the requirement of at least one auxiliary receiver, yet retains the scanning function of the omitted element and also obtains, at least, the advantages described in the application.

It is because appellant's claimed invention scans one or more satellite audio radio channels or stations for information (e.g., designations) and compares the information to designations of works of authorship selectively saved in a memory by a user (i.e., a user designation), in the absence of one or more auxiliary receivers and where the step of comparing a designation occurs while the receiver is providing audio to the user, such that when a match is found the invention alerts a user to a channel/station other than the channel/station that the user is listening to.

In other words, none of the cited references teach alerting a user of a single mobile receiver to a real-time broadcast that is playing on a channel other than the one that the user is currently listening to. Clearly, the claims do in fact recite more than a mere retrofit receiver system such as Figure 8(a), element 802 of Robbins.

This distinction referenced above is made even clearer in dependent claim 77, which further requires receiving a second signal from a terrestrial repeater on the same receiver that receives the satellite radio signal. In claim 77, two separate signals are received by the same receiver (i.e., the same single receiver). The teachings of Robbins, require even more auxiliary receivers to scan the multiple incoming data streams. Thus, claim 77 is also patentably distinct from the cited art, independent of any arguments concerning the parent claim.

ii. The Art Teaches Away From the Claimed Invention Because
Robbins Insistence on Multiple Receivers Steers One Away From
Using One Receiver

As stated in the MPEP at § 2141.02, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Following the teachings of references available to one of ordinary skill in the art at the time of the invention, one of ordinary skill in the art would have been led in directions counter to the direction taken by appellant for the following reasons. Specifically, the teachings of the primary Robbins reference show that one of skill in the art would not have been motivated to integrate the auxiliary and main receivers together, nor would one such skilled have considered the system of a main receiver and auxiliary receiver (e.g., the receiving *system* 802, which includes a main receiver (804) and one or more auxiliary receivers (806), detailed at column 40 of Robbins) as a single receiver, much less arrive at the claimed invention with any expectation of success, as explained below in part iii.

This is because Robbins perceives a need for at least one auxiliary receiver to scan for ID codes on streams that are the same or of a different type than that which is received by the main receiver, which is also consistent with Robbins intention of retrofitting main receivers.

Yet Robbins also indicates that a plurality of auxiliary receivers is preferable to one. At col. 33, lines 24-37, Robbins recites:

“Another exemplary embodiment of a device used for the scanning step (S114) as described in FIG. 1, of an embodiment of the present invention, may include a plurality of auxiliary receivers to scan the data stream spectrum. This may increase the price of the system over that of one auxiliary receiver, however, the response time in which the system may automatically tune to a specific data stream may be decreased over that of one auxiliary receiver, since the total amount of time T spent detecting all the data streams would be divided by the number of auxiliary receivers. Therefore, the number of auxiliary receivers will proportionately decrease the amount of time needed to detect and compare a particular data stream.” (emphasis added)

As noted above, the invention of Robbins recognizes the advantages of a plurality of auxiliary receivers to proportionately decrease the amount of time needed to detect and compare a particular data stream relative to the time required for one auxiliary receiver, i.e. more auxiliary receivers are better.

Even in a relatively simple embodiment where the same stream type is received by the main receiver and is scanned by auxiliary receivers, Robbins teaches that the number of auxiliary receivers can be decreased, but that auxiliary receivers are still required, see, e.g. col. 35, lines 49-54 of Robbins.

At the time of the invention, to one of ordinary skill in the art, Robbins teaches away from eliminating all auxiliary receivers or considering an auxiliary receiver alone in a vacuum or even considering the consolidation of a main receiver and auxiliary receiver(s) together into one receiver because (1) the use of a plurality of auxiliary receivers is explicitly stated as providing superior results relative to a single auxiliary receiver (even in the relatively simple embodiment of Robbins) and because multiple stream types can be scanned using auxiliary receivers, (2) Robbins *requires* at least one auxiliary receiver *in combination with* a main receiver to function, and (3) Robbins does not disclose or suggest that the

objectives of the invention can be met, even in an inferior manner, in the absence of either a main or auxiliary receiver.

Moreover, the Examiner has failed to show that there existed any other reason, based on what was known at the time of the invention, to perform any modifications to the system of Robbins that might result in the claimed invention. Specifically, Robbins' teachings work for their intended purpose and to the extent the Examiner offers any reasons for a modification to Robbins, in view of what was known *at the time of the invention*, such reasons are contrary to the common sense of one of ordinary skill in the art.

For example, a satellite radio reference cited against the claims in an earlier office action, namely Brown et al, U.S. Patent No. 6,397,076, also teaches away from the claimed invention or combination with Robbins. As described in appellant's response dated January 20, 2006, appellant overcame the Examiner's rejection based on a combination of Robbins and Brown et al. because the Office overlooked the fact that the ID codes and other disclosures of Brown et al. are far different from what is described in Robbins, and even more so from what is claimed by appellant.

In contrast to appellant's storage of data by user selection, Brown et al. teaches a fixed register on a single receiver that is pre-loaded with one or more dispatch ID codes such that a specific radio can be targeted by a dispatcher. In Brown et al., when equality is found between the fixed stored radio ID codes (that is, the locally stored code functions to identify the radio itself) and a dispatch ID code, a signal is coupled to the controller indicating such equality, as described at column 5, lines 43-55 of Brown et al. The controller directs the channel select switch to decode the appropriate dispatch broadcast signal and to revert back to a previously selected broadcast channel for resumption of the program originally selected by the user, as described at column 5, lines 56 through column 6, line 18. In other words, when the teachings of Brown et al. are followed, one of skill in the art would have been led to a design or method that includes a single receiver having a fixed register that automatically changes to a dispatch message channel, and then later automatically switches back.

Thus, the art that was available to one of ordinary skill at the time of the invention led in a direction contrary to that taken by appellant and the claimed invention *could not be predicted* from the art.

iii. There is No Reasonable Expectation of Success of Arriving At the Claimed Invention

It is well established that there must have been at the time of the invention a reasonable expectation of success. *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1207-1208 (Fed. Cir. 1991), *cert. denied* 502 U.S. 856 (1991) (holding that obviousness requires references to show that there was, at the time of the invention, a reasonable expectation of success). For the reasons described herein, it is clear that the inventor of the present invention showed insight that was contrary to the expectations of the art, which is itself indicia of unobviousness. See, e.g., MPEP 2145(X)(D) and *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986).

At the time of the invention, even if the references were combined or modified in the manner suggested by the Examiner, one of skill in the art would still not arrive at the claimed invention. Specifically, the alleged and hypothetical combination requires, at least, a main satellite audio radio receiver and one or more auxiliary satellite audio radio receivers together in a functioning system. This is far different from the claimed invention, where the same receiver scans, saves, provides audio, and alerts a user, as detailed above. Thus, one of ordinary skill in the art had no expectation of success of arriving at the claimed invention, much less a reasonable expectation of success.

Moreover, appellant submits that the teachings of Robbins show that any modifications of Robbins to allegedly arrive at the claimed invention renders Robbins unsatisfactory for its intended purpose and destroys its intended function. This is because even if Robbins were forcibly modified in the manner suggested by the Examiner, following the teachings of all the references in combination, in the absence of one or more auxiliary receivers (the only dedicated devices that are taught to scan), no scanning occurs, thereby rendering Robbins non-functional. Moreover, the alleged modified device could then not be used to scan multiple data stream types, which is also inconsistent with Robbins. Alternatively, in the absence of a main receiver no data is selectively saved in a memory to which to compare the ID codes from the auxiliary receiver(s), thereby again rendering Robbins non-functional. See, e.g., *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Therefore, the Examiner's basis for the rejection of the claims is also incorrect because one of ordinary skill in the art would have known that Robbins requires a dedicated main receiver and one or more dedicated auxiliary receivers to function, and modification of either receiver type destroys the utility of the reference teachings.

It is particularly telling that the references fail to even recognize these deficiencies in the art as problems to be overcome. Under the "teaching suggestion and motivation" test (the TSM test), which is still a valid tool for determining obviousness, in all the referenced knowledge available to one of ordinary skill in the art, there existed no teaching, suggestion or motivation to modify the cited art counter to the Robbins or in the manner contemplated by the Examiner to then allegedly arrive at the claimed invention. Appellant submits that this is because one of ordinary skill in the art would have believed that such modifications would destroy the intended function of the Robbins reference.

In summary, in the absence of appellant's disclosure, the very art cited against the claims during prosecution show that at the time of filing, one of ordinary skill in the art would have been presented with *uniquely challenging and difficult* problems to overcome, namely getting one receiver to function like both a main and auxiliary receiver and to develop a dynamic database that stores satellite audio radio data based on user selection such that scanning occurs while the receiver is providing audio to a user, to then allegedly arrive at the claimed invention. Additional problems also include avoiding the pitfall of rendering the reference teachings non-functional for their intended purposes. In the absence of appellant's teachings, such a fictional person would have had no reasonable expectation of success of arriving at the claimed invention.

(c). Whether Rejections are Improper When Limitations of the Claims Are Not Found In The Cited Art and the Examiner Rejects Limitations That Are Not in the Claims

(i) Claim 61

With respect to claim 61, the Examiner rejects the language of "is or will be playing on one or more...", as shown in the first paragraph of page 9 of the Final Office Action dated 3/21/2007. However, the limitation does not exist in the rejected claim. Clearly, appellant

cannot refute rejections that are not based on limitations in the claims and clearly a rejection is improper when it is based on a limitation that is not found in the claim.

As shown on page 4 of the Final Office Action, claim 61 is further rejected in view of the teachings of Robbins at column 5, lines 20-28. However, the cited section is directed to confirmation signals and recites nothing of relevance to the specified claim limitation much less the proposition for which the Examiner is offering it.

(ii) Claims 46, 49, 57, 59, 79 and 80

Similarly, claims 46, 49, 57, 59, 79 and 80 continue to stand rejected in view of the Brown et al. reference even though it has been established that Brown et al. is not germane to the issues herein other than for the fact that the reference establishes that one of skill in the art would have proceeded in a direction that is different than the one taken by appellant. In the responses to many of the Office Actions, appellant asserted that the continued rejections in view of Brown et al. are in error. To date, the Examiner has not removed or clarified the rejections, even after repeated requests. Appellant now appeals the rejection of the claims in view of this previously overcome art such that a response to the rejection can be articulated.

(iii) Claims 43, 52, 74, and 76

With respect to claims 43, 52, 74 and 76, the Examiner failed to address the limitations generally directed to “alerting a user.” In an absence of a well reasoned basis for the rejection, the claims are allowable. Appellant submits that when viewed as a whole, the claims require that the same receiver which scans and saves user designations also alerts a user, and the interrelationship between such limitations patentably distinguish the claimed invention from the art.

(iv) Claims 43 and 52

Appellant submits that claims 43 and 52 are separately patentable as these claims recite a specific time frame for searching that is unobvious in view of the art and which is not recited in the cited references. The Examiner asserts that Robbins teaches that *the channel* should be repeatedly scanned and then the Examiner asserts without a basis that “repeatedly” means a reasonable range of 0.01 seconds to 3 minute intervals. The Examiner provides no citation for the alleged teaching and appellant asserts that Robbins uses the word

“repeatedly” twice in the specification and in both instances it is in reference to scanning and thus is in reference to an auxiliary receiver. The term is not used in reference to any one receiver that performs all of the claimed limitations nor has the Examiner established that the limitation results from the ordinary course of innovation or otherwise.

3. When the Graham Analysis is Properly Applied, Substantial Evidence Establishes a Finding of Non-Obviousness

Notwithstanding any substantive arguments presented above with respect to the Examiner’s failure to ascertain, or even acknowledge, the differences between the prior art and the ramifications of those differences to the patentability of the claims, the Examiner has also failed to follow the other procedural *Graham* requirements to establish a *prima facie* case of obviousness.

As described above, a proper *Graham* analysis under §103 requires the Examiner to determine the scope and content of the prior art, ascertain the differences between the prior art and the claims at issue, and resolve the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. The Examiner must provide substantial evidence to support a conclusion that a claimed invention is obvious. See Dickinson v. Zurko, 527 U.S. at 164 (“A reviewing court reviews an agency’s reasoning to determine whether it is “arbitrary” or “capricious,” or, if bound up with a record-based factual conclusion, to determine whether it is supported by “substantial evidence.””), citing SEC v. Chenery Corp., 318 U.S. 80, 89-93 (1943).

The person of ordinary skill in the art is a hypothetical person who is presumed to know the relevant prior art. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986). In determining this skill level, the court may consider various factors including “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *Id.* (*cited in In re GPAC*, 57 F.3d 1573, 1579, 35 USPQ2d 1116, 1121 (Fed. Cir. 1995)). In a given case, every factor may not be present, and one or more factors may predominate. *Id.* at 962-63, 1 USPQ2d at 1201.

The Examiner's errors in analysis with respect to the first two *Graham* factors are set forth in section 2, above. Additionally, the Examiner errors on the third prong as well, and provides no evidence that resolves the level of ordinary skill in the pertinent art or consideration of the relevant factors. The Examiner fails to specify the level of ordinary skill in the art at the time of the invention, much less provide substantial evidence to support any position with respect to a determination of that level of skill. At no point during the prosecution of the application has the Examiner established the characteristics of one of ordinary skill in the art or whether the skill level of such a fictitious person is high, low or somewhere in between. Nor has the Examiner inserted into the record an affidavit establishing that the Examiner's qualifications meet the criteria of one of skill in the art.

Therefore, to the extent the Examiner has offered any evidence or reasoning with some rational underpinning to support the legal conclusion of obviousness, such evidence is fundamentally flawed and insufficient to support a *prima facie* case of obviousness. Thus, the Examiner has failed to meet the "substantial evidence" burden required by law with respect to *all three Graham requirements*.

By failing to even establish the level of skill of one of ordinary skill in the pertinent art, the Examiner cannot provide any proper evidence or reasoning that shows the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious *to anyone* at the time the invention was made, much less obvious to a person having *ordinary skill* in the art to which said subject matter pertains. Moreover, to the extent the Examiner does provide any evidence, such evidence actually supports the patentability of the claims, as explained above.

Clearly establishing the level of skill of one of ordinary skill is important not only from a procedural perspective but also because once the relevant level of skill in the art is determined, it is apparent that to one of *ordinary skill* in the art the teachings of the Robbin's reference are not so simply modifiable or combinable with other teachings in the manner suggested by the Examiner to then arrive at the claimed invention. For example, and as described above, the weight of substantial evidence is such that both Brown et al. and Robbins, when considered as a whole, teach one of ordinary skill in the art to proceed in directions contrary to that undertaken by appellant.

VIII. Claims Appendix (37 C.F.R. §41.37 (C)(l)(viii))

1-40 (Cancelled)

41. (Previously Presented) A method of selecting a station among a plurality of stations, comprising the steps of:

receiving on a single mobile receiver a plurality of stations, each station comprising a digitally encoded stream containing a designation representative of a work of authorship that is being broadcast over a global communication network, said global communication network having a plurality of stations;

decoding a selected station from among the plurality of stations;

comparing the decoded station with a user designated work of authorship that was selectively saved in a memory by a user while the work of authorship was playing to determine an indication that the user designated work of authorship is playing on the decoded station received by the receiver, wherein the step of comparing occurs while the receiver is providing audio to the user;

alerting a user to a station other than the station that the user is currently listening to, wherein the other station is playing the user designated work of authorship; and wherein the global communication network comprises a digital satellite audio radio network.

42. (Previously Presented) The method of claim 41, wherein the step of comparing the decoded station with a user designated work of authorship further comprises the step of storing the designation representative of a work of authorship of the decoded station in a memory.

43. (Previously Presented) A method of selecting an audio broadcast among two or more audio digital broadcast stations, comprising the steps of: receiving on a single mobile receiver a digitally encoded stream of at least two broadcast stations over a global communication network, wherein at least one broadcast station contains a station designation of a work of authorship as an indication of a work of authorship contained in a signal from the broadcast station;

decoding a broadcast station;

providing a user designation of a work of authorship;

storing through user selection the user designation of a work of authorship in a memory while the station is playing the work;

comparing the saved user designation of a work of authorship with the station designation of a work of authorship at 0.01 second to 3 minute intervals while the receiver is providing audio to the user;

alerting a user of desired content if a user designation of a work of authorship matches a station designation of a work of authorship that is playing on a station other than the station that the user is currently listening to; and

wherein the global communication network comprises a digital satellite audio radio network.

44. (Cancelled)

45. (Previously Presented) The method of claim 43, further comprising the steps of providing and recording desired content.

46. (Previously Presented) The method of claim 45, wherein the desired content is recorded in a MPEG or .WAV format.

47. (Previously Presented) The method of claim 43, wherein the station designation of a work of authorship is provided to the user prior to a broadcast of the work of authorship.

48. (Previously Presented) The method of claim 43, wherein the work of authorship is selected from a group comprising songs, books, movies, movie shorts, educational works, sports events.

49. (Previously Presented) The method of claim 43, wherein the designation of a work of authorship is selected from the group comprising titles, segments of titles, key phrases and key words.

50. (Previously Presented) The method of claim 43, wherein the user has the ability to listen to the work of authorship.

51. (Previously Presented) The method of claim 43, further comprising the step of saving a work of authorship, in real-time, as the work of authorship is received.

52. (Previously Presented) A device for receiving digital audio radio signals and selecting channels containing user desired content, comprising:

a single mobile receiver for receiving over a global communication network a digitally encoded stream of at least two broadcast stations, wherein at least one station broadcast contains a designation of a work of authorship as an indication of content of the station broadcast;

a decoder for selectively decoding a station broadcast;

a user interface for a user to selectively store a user designation of a work of authorship in a memory, wherein the designation is saved during receipt of the work;

a general purpose computer programmed to compare an earlier selectively saved user designation of a work of authorship with a station designation of a work of authorship at 0.01 second to 3 minute intervals while the receiver is providing audio to the user and to alert a user of desired content if a stored designation of a work of authorship matches the designation of a work of authorship in the at least one broadcast station other than the station that the user is currently listening to; and

wherein the global communication network comprises a digital satellite audio radio network.

53. (Previously Presented) The device of claim 52, further comprising a recording media for recording the user desired work of authorship in real time as it is provided over the global communication network.

54. (Cancelled)

55. (Previously Presented) The device of claim 52, further comprising a recording media for recording the user desired work of authorship in real time as it is provided over the global communication network.

56. (Previously Presented) The device of claim 55, wherein the recording media includes a hard drive, and/or a floppy drive, and/or an optical drive.

57. (Previously Presented) The device of claim 56, wherein the user desired work of authorship is recorded in an MPEG or .WAV format.

58. (Previously Presented) The device of claim 52, wherein the work of authorship is selected from a group consisting of songs, books, movies, movie shorts, educational works, and sports events.

59. (Previously Presented) The device of claim 52, wherein the designation of a work of authorship is selected from a group consisting of titles, segments of titles, key phrases and keywords.

60. (Previously Presented) The device of claim 52, wherein the user interface comprises a device for a user to store a user designation of a work of authorship in a memory by saving the decoded station broadcast as the decoded station broadcast is received at the receiver.

61. (Previously Presented) A method of selecting a satellite audio radio channel, comprising the steps of:

receiving one or more digital satellite audio radio channels using a single mobile receiver, wherein one or more of the channels includes additional information that indicates the content of one or more of the channels;

comparing the information on one or more of the received digital satellite audio radio channels with a designation of a work of authorship that was selectively saved in a memory by a user when the work of authorship was playing on the receiver to determine whether the user designated work of authorship is currently playing on one or more of the digital satellite audio radio channels receivable by the receiver, wherein the step of comparing the information occurs while the receiver is providing audio to the user; and

alerting the user to a satellite audio radio channel other than the channel that the user is currently listening to, wherein the channel to which the user is alerted is playing the user designated work of authorship.

62. (Previously Presented) The method of claim 61, further comprising decoding a radio channel from among the one or more digital radio channels.

63. (Previously Presented) The method of claim 61, wherein the information compared with the user designated work of authorship is information from a decoded radio channel.

64. (Previously Presented) The method of claim 61, wherein the information on the one or more radio channels comprises data indicating the particular work of authorship that is playing on one or more of the digital radio channels.

65.- 73. (Cancelled)

74. (Previously Presented) A receiver, comprising: a mobile general purpose computer comprising a single mobile receiver, wherein the receiver is configured to receive one or more digital satellite audio radio broadcast channels, the general purpose computer is also configured to receive data indicating what is being played on each channel; wherein the general purpose computer further includes a memory, the memory includes a playlist of designations of works of authorship selectively saved in the memory by the user, and the general purpose computer is configured to alert a user to change the channel to a specific broadcast channel other than the channel that the user is currently listening to if the data of any one channel corresponds to a designation in the playlist wherein the alert is provided to a user while the receiver is also providing audio to the user.

75. (Previously Presented) A method of selecting a radio station, comprising the steps of: using a single mobile receiver to receive one or more digital satellite audio radio stations and data from a satellite wherein the data indicates what work of authorship is being played on the one or more digital satellite audio radio stations;

selectively inputting a designation of a user desired work of authorship into a memory of a general purpose computer while the work of authorship is playing on the single receiver, wherein the general purpose computer is adapted to monitor the data received by the receiver while the receiver is providing audio to the user;

using the general purpose computer to monitor the data; and

receiving an alert when the data corresponds to the earlier input designation of the user desired work of authorship thereby indicating that the desired work of authorship is being played on one or more of the digital satellite audio radio stations other than the station the user is currently listening to.

76. (Previously Presented) A method of selecting a satellite audio radio channel, comprising the steps of:

using a single mobile receiver to receive a digital audio radio channels and additional information from a satellite wherein the information indicates which works of authorship are being broadcast on one or more of at least 100 digital satellite audio radio channels;

using the single mobile receiver to compare the information with a user designated work of authorship that was selectively saved in a memory by a user during an earlier receipt of that work of authorship on the receiver to determine whether the user designated work of authorship is playing on one or more of the digital satellite audio radio channels while the receiver is providing audio to the user;

receiving an alert to change to the one or more of the digital satellite audio radio channels playing the user designated work of authorship other than the channel that the user is currently listening to when the information of one or more of the at least 100 channels corresponds to the user designated work of authorship.

77. (Previously Presented) The method of claim 76, further comprising receiving information from a terrestrial repeater of the information from a satellite, wherein the information from the terrestrial repeater also indicates which works of authorship are being broadcast on one or more of the at least 100 digital satellite audio radio channels.

78. (Previously Presented) The method of claim 76, further comprising positioning a receiver adapted to receive at least 100 digital satellite audio channels in a vehicle.

79. (Previously Presented) The method of claim 76, wherein the user designated work of authorship comprises a title.

80. (Previously Presented) The method of claim 76, wherein the user designated work of authorship comprises an artist.

81. (Previously Presented) The method of claim 78, wherein the vehicle comprises a car.

IX. Evidence Appendix (37 C.F.R. §41.37 (C)(1)(ix))

None.

X. Related Proceedings Appendix (37 C.F.R §41.37 (C)(1)(x))

None.

Conclusion

Appellant submits that the rejections are improper. Specifically, (1) the claim term “single” is fully supported, (2) each and every claim limitation cannot be found in the cited art, and (3) the art teaches away from the claimed invention. Although each claim limitation cannot be found in the cited art, even if the limitations were found, the creative steps that a person of ordinary skill in the art would employ in view of the teachings of the references leads away from the claimed invention. Specifically, Robbins requires two types of dedicated receivers, namely a main to store ID codes and an auxiliary receiver to scan, whereas the claimed invention only includes one receiver that performs multiple functions. Even in the embodiments where the same stream type is received by the main receiver and auxiliary receiver, Robbins still requires auxiliary receivers.

According to the Examiner, to allegedly arrive at the claimed invention one of the receivers must be removed, but doing so removes at least one functionality (either scanning or saving ID codes) that cannot be replaced by the functionality of the remaining dedicated receiver. None of the other cited art cures these deficiencies of the Robbins reference.

For the foregoing reasons, the rejection of the pending claims should be withdrawn and the application forwarded to the Issue branch

Respectfully Submitted,

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